

CLAIMS:

1. Front-end device for a CCD camera, with an input for receiving an analog input signal with an input frequency from a CCD sensor, an output for supplying a digital output signal and comprising a sampling circuit for clamping the input signal and for sampling the claimed signal and an AD converter for converting the sampled signal into a digital signal, characterized in that the sampling circuit comprises a variable capacitor which value depends on the input frequency of the input signal and aperture time of the sample pulse.

5

2. Front-end device as claimed in claim 1, characterized in that the sampling circuit comprises resetting means for resetting the variable capacitor.

10

3. Front-end device as claimed in claim 1, characterized in that the sampling circuit comprises a white level control loop.

15

4. Front-end device as claimed in claim 1, characterized in that the sampling circuit comprises a black level control loop coupled to the variable capacitor.

20

5. Front-end device as claimed in claim 4, characterized in that the black level control loop minimizes the voltage difference over the variable capacitor for optical black.

6. Sampling circuit for use in a front-end device according to claim 1.

7. CCD camera comprising a front-end device as claimed in claim 1.